

# sentinel™ solar site lite

## INSTALLATION AND USER MANUAL



**AF FLORENCE**  
manufacturing company

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A GIBRALTAR INDUSTRIES COMPANY 

U.S. Patent No. 6,948,826

Thank you for purchasing Florence Manufacturing's sentinel™ solar site lite, a solar-powered motion-activated lighting system. Read all assembly and installation instructions before starting this project. Following these steps in order will ensure correct installation and help ensure that you receive the maximum benefit of this lighting system.

**Tools & equipment needed (not included with kit):**

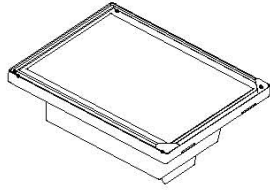
- ✓ 7/32" hex bit or Allen wrench for pole assembly
- ✓ 5/32" hex bit or Allen wrench for solar-module/housing fastener
- ✓ rubber hammer or mallet
- ✓ heavy hammer
- ✓ level (magnetic preferred)

**Additional tools & hardware needed if installation is to be surface mounted (not included with kit):**

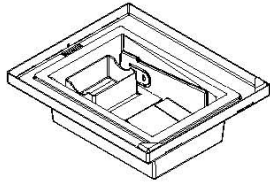
- ✓ four (4) 1/2" x 6" concrete anchor bolts with washers and nuts
- ✓ (2) 3/4" wrenches (or a ratchet and wrench)
- ✓ electric hammer-drill with 1/2" diameter x 6" long masonry drill-bit
- ✓ electric drill with 17/32" diameter drill bit
- ✓ carpenter's square

## Service Parts

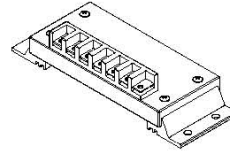
27107-## SOLAR LITE HOUSING/SOLAR ASSY INCLUDES



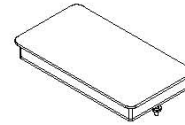
27106-## - SOLAR HOUSING



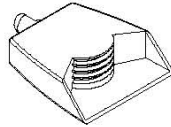
27236 - SOLAR CONTROLLER SS-6L



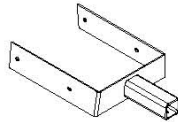
27306 BRICK LED



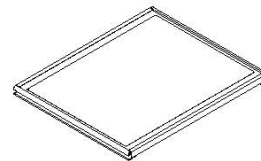
48303-0 - MOTION DETECTOR, LIGHTING OPTION, STOCK WITHOUT CONNECTORS



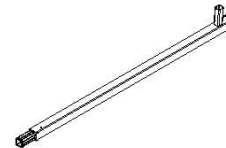
27101## - LITE HOUSING FORK



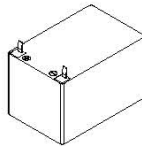
48314 - SOLAR PANEL



27104## - 7' UPPER POLE

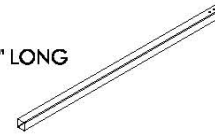


48309 - BATTERY - SEALED ACID 12V 12AH



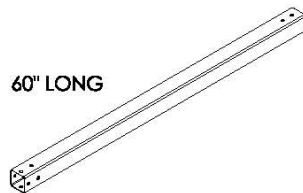
27333## - 7' LOWER POLE FOR IN GROUND MOUNTING

84" LONG



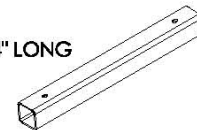
27315## - 5' LOWER POLE FOR SURFACE MOUNTING

60" LONG

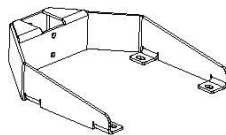


27333## - 2' RISER

23 3/4" LONG

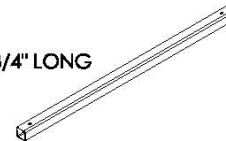


27108## - SURFACE MOUNT BASE



27332## - 5' RISER

59 3/4" LONG



### HARDWARE LIST

PART NUMBER	DESCRIPTION	IN-GROUND QTY	SURFACE MOUNT QTY
PH27109	HARDWARE KIT INCLUDES ALL BELOW	PART	PART
27327	SCREW 1/2-12 X 4.0 HEX CAP 18-8SS	0	2
92014	WASHER, LOCK 1/2 X .869 O.D. SS	0	2
92013	NUT-HEX .50-13 SS	0	2
27334	SCREW 3/8-16 X .75" BUTTON SOCKET HD CAP	4	4

### PAINT PARTS

##	FINISH OPTIONS
PGF	POSTAL GREY FLAT
BKP	BLACK PEBBLE
SDP	SANDSTONE PEBBLE

TABLE OF CONTENTS

Review your Florence *sentinel™* Kit: .....5

Step 1 Assemble the *sentinel™* Housing .....6

Step 2 Connect *Upper* and *Lower Poles* .....6

Step 3 Attach *Riser* to *Upper Pole*.....6

Step 4 Attach *Lite Housing Fork* to *Riser*.....6

Step 5 Attach *Lite Housing Assembly* to *Lite Housing Fork* .....6

Step 6 *In-Ground Mount* .....6

Step 7 Locating *Surface Mounting Base* on Concrete .....6

Step 8 Attach *Surface Mount Base* to *Lower Pole*.....6

Step 9 Attach *System* to *Concrete* .....6

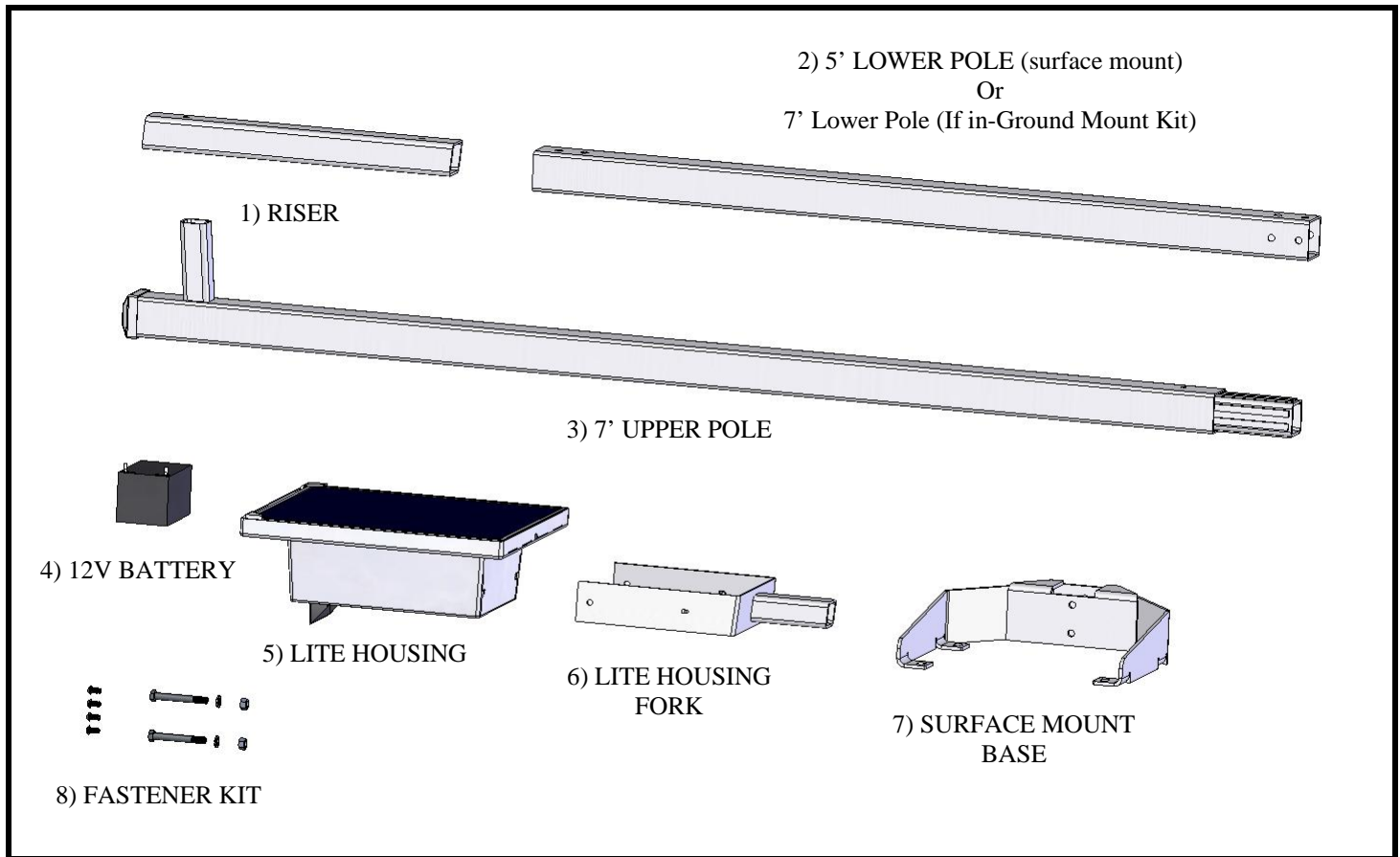
Step 10 Adjusting Motion Sensor Settings .....6

Appendix A.....6

Frequently Asked Questions .....6

Solar Hours Per Day By Location .....6

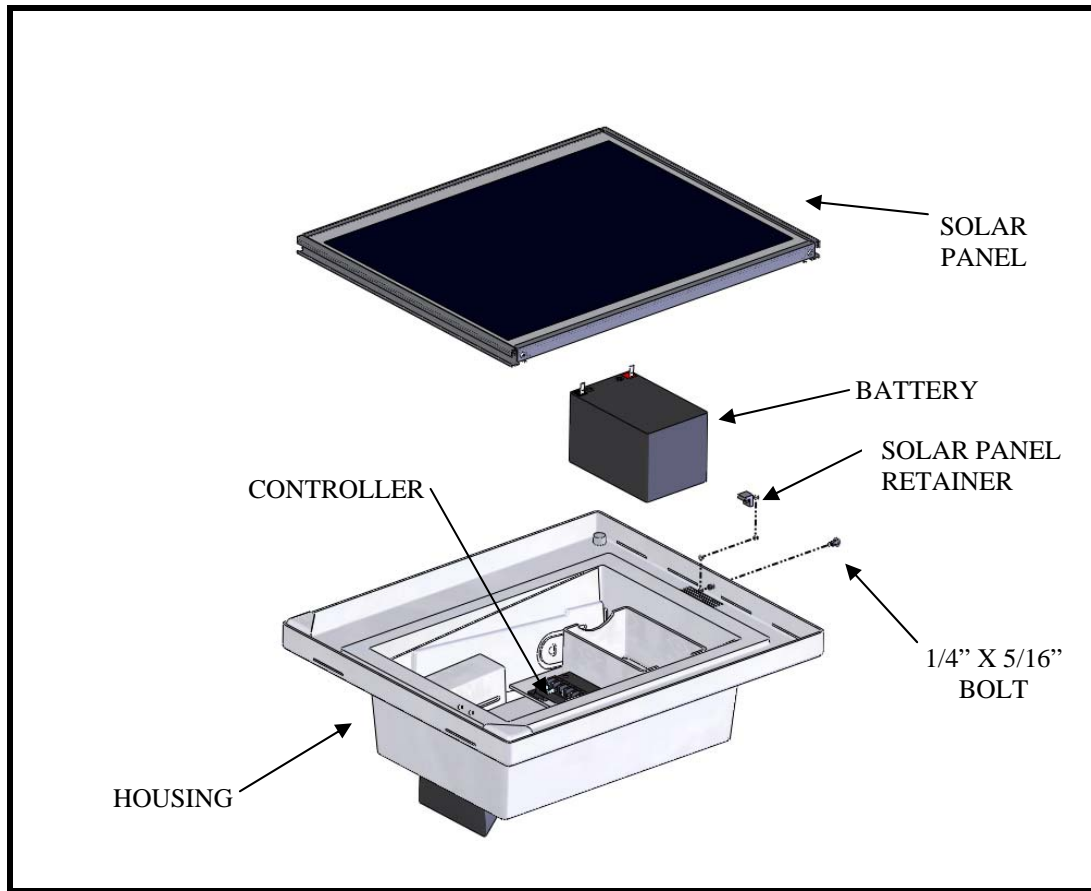
Troubleshooting Guide .....6



*Figure 1*

### Review your Florence sentinel™ Solar Site Lite Kit:

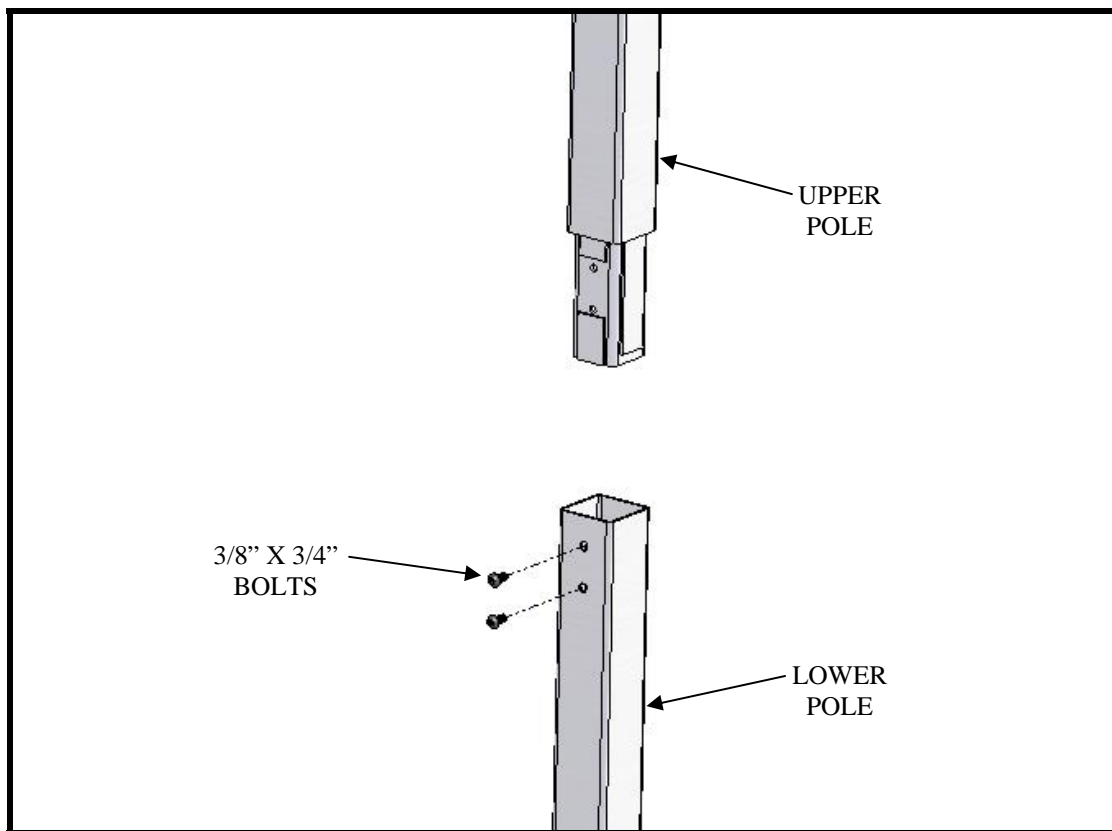
- ✓ Remove all components from the boxes and carefully examine them for any damage. In particular, make sure that the solar panel, the motion-sensor (including its support arm) and the light have not been damaged or pushed out of position due to potential rough handling during shipping.
- ✓ Lay all components out in an area to review - preferably on a large mat in order to prevent paint damage to the base, pole-sections, and lite housing.
- ✓ Make sure the following components are included in your light kit, as shown in Figure 1:
  - 1) riser (arm that extends from the pole to the lite housing)
  - 2) 5' lower pole made from 3" square steel tubing (7' pole if in-ground mounting)
  - 3) 7' upper pole (with welded-on coupler) made from 3" square steel tubing
  - 4) 12V Battery
  - 5) lite housing assembly (includes housing, solar-module, controller, lite, and motion-sensor)
  - 6) lite housing fork (attaches lite housing to riser)
  - 7) surface mount base (only included if unit is to be surface mounted)
  - 8) fastener kit (contains two (2) 1/2" x 4" base-bolts with lock washers and nuts, four (4) 3/8" x 3/4" button head hex screws, and operational literature for the motion-sensor and controller) included with lite housing



*Figure 2*

### Step 1 Assemble the sentinel™ Housing

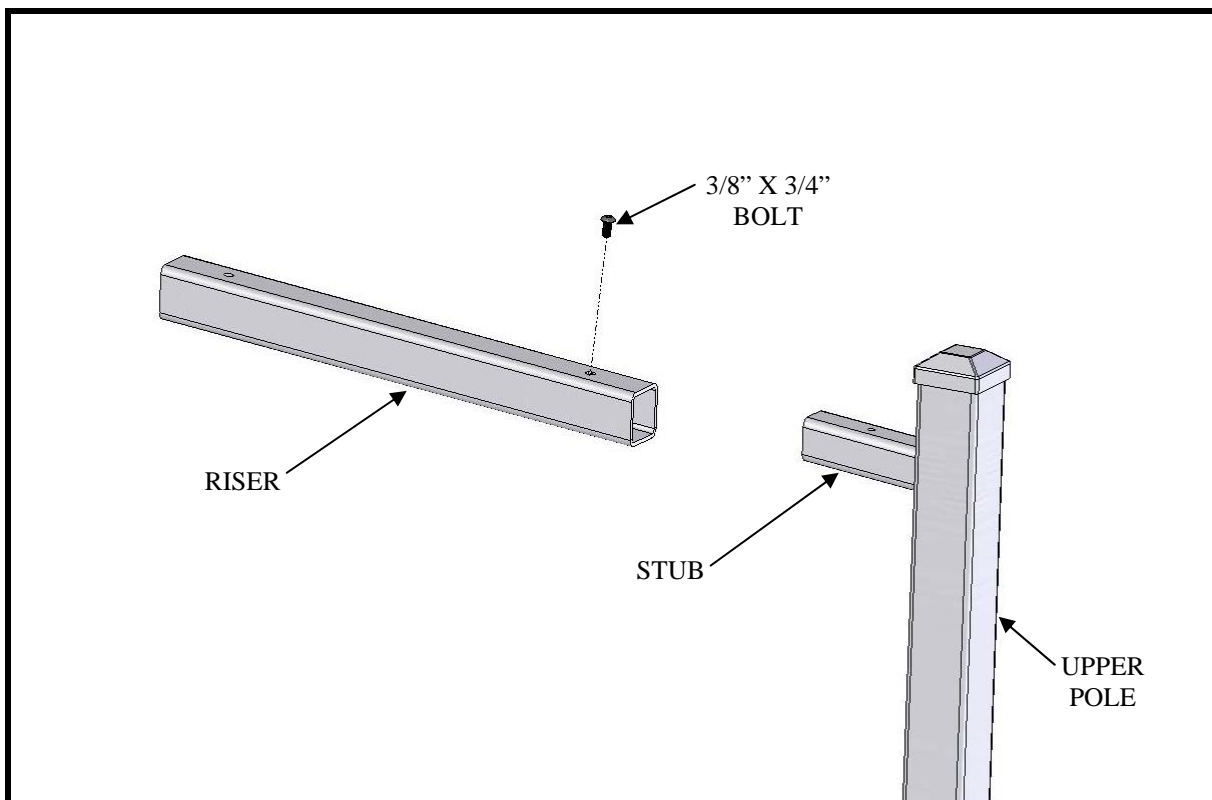
- 1) Set the housing on a soft surface with the solar panel facing up, taking care not to damage the motion sensor.
- 2) Remove 1/4" x 5/16" bolt and solar panel retainer using a 5/32" hex-bit or Allen wrench.
- 3) Remove the solar panel from the housing, being careful not to put any strain on the wires that run from the solar panel to the controller.
- 4) Place the battery in the battery holder and connect the battery leads (red-to-red & black-to-black). If the battery is properly connected the red LED light on the motion sensor or the red low voltage LED on the controller should come on at this time (the motion controller LED may be solid or may go on-and-off when it detects motion). If you are assembling the lighting system outdoors during daylight the green "charging" LED on the controller should indicate that the battery is being charged.
- 5) Reinstall the solar panel and secure the solar panel with the solar panel retainer and 1/4" x 1" retaining bolt using the 5/32 hex-bit. Do not over tighten or damage to housing and/or solar panel may occur.
- 6) Set the housing assembly unit aside while the pole is being assembled.



*Figure 3*

### **Step 2 Connect Upper and Lower Poles**

- 1) Slide the upper pole connection-section into the 5' (7' if in-ground mount) lower pole so that the bolt-holes line up.
- 2) Install and tighten the 3/8" x 3/4" bolts securely using 7/32 hex bit.

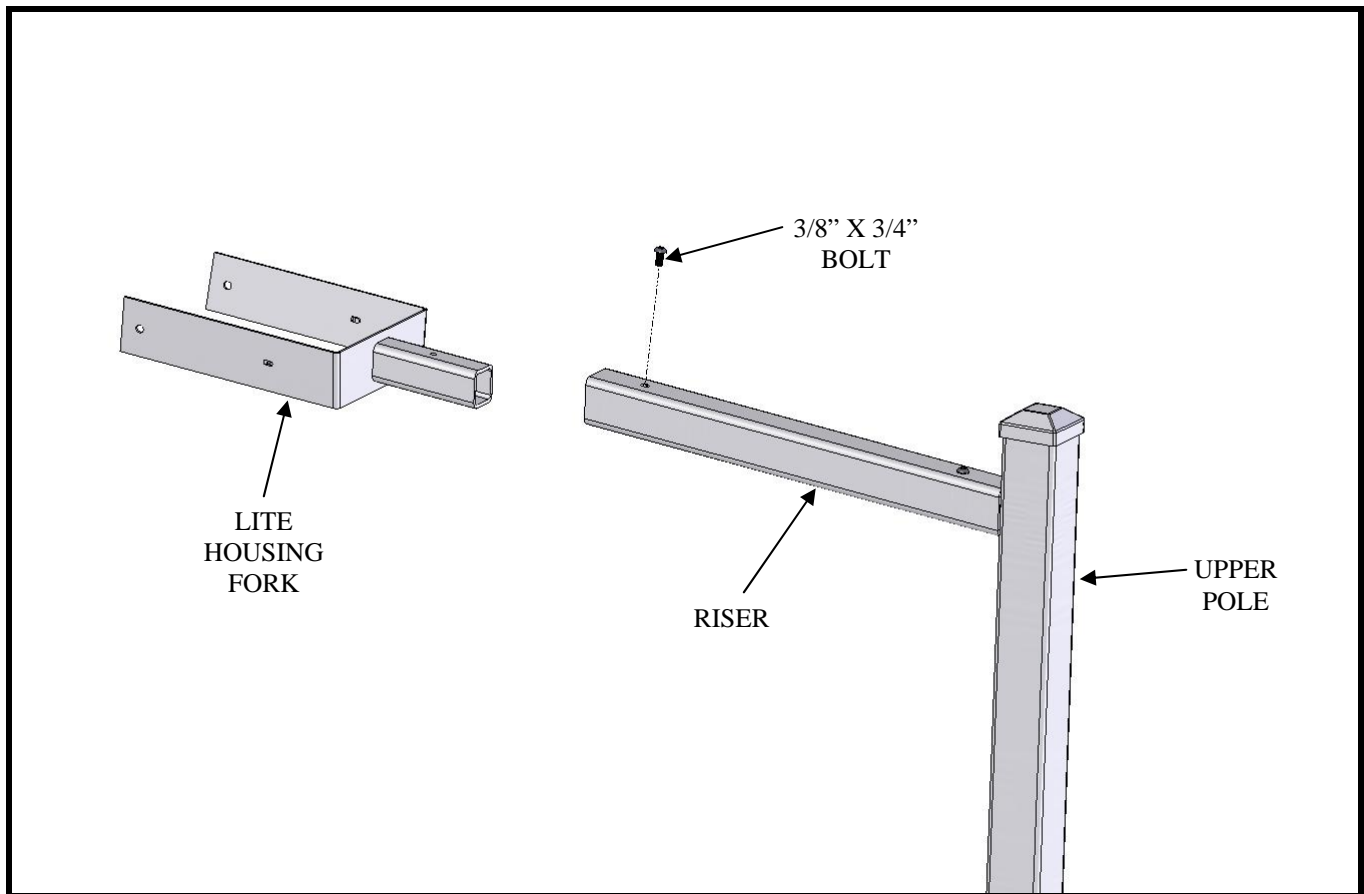


*Figure 4*

### **Step 3 Attach Riser to Upper Pole**

- 1) Slide the riser over the stub of the upper pole making sure that the correct end of the riser is toward the pole. (Sloped end of riser should be parallel to vertical tube so that the bolt holes line up.)
- 2) Install and tighten the 3/8\" x 3/4\" bolt securely using the 7/32 hex bit.

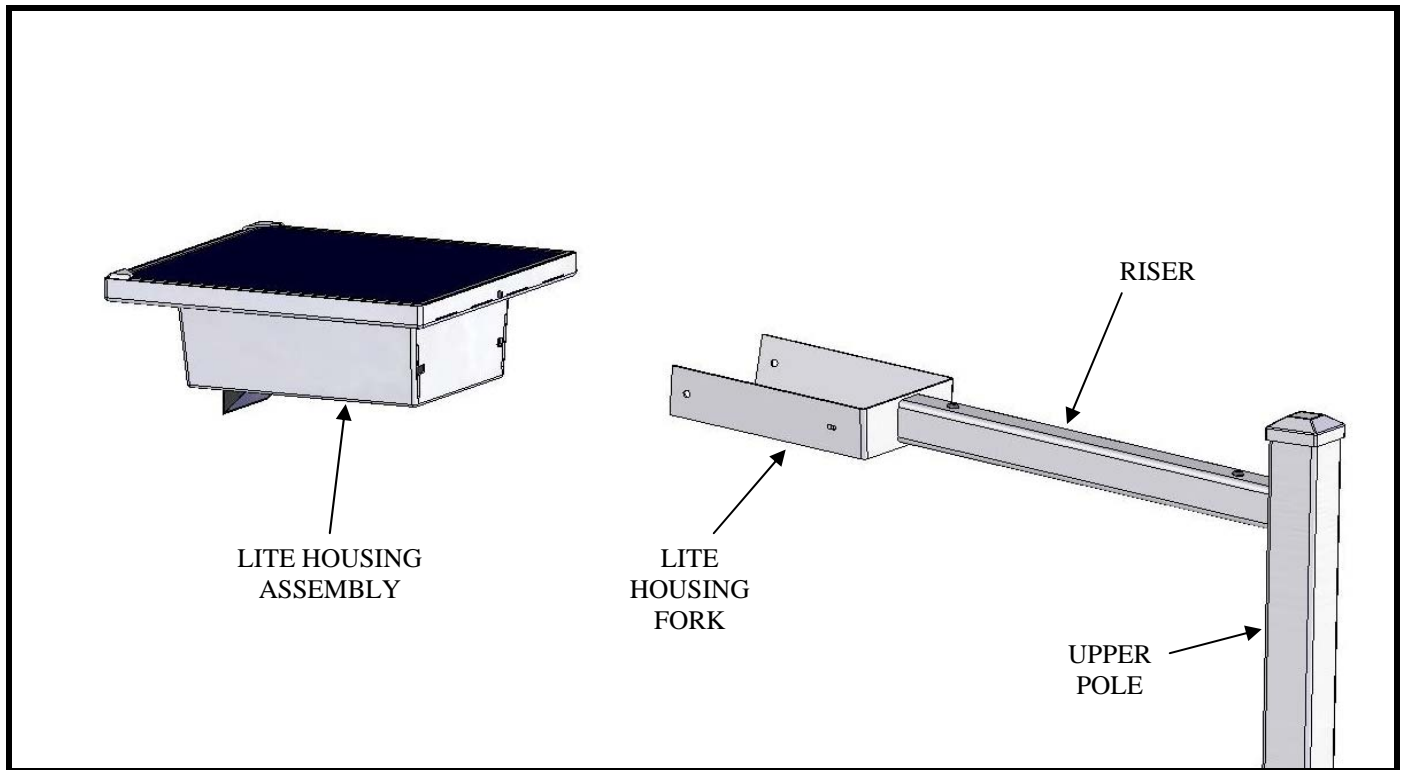




*Figure 5*

#### **Step 4 Attach Lite Housing Fork to Riser**

- 1) Slide the lite housing fork stub into the riser so that the bolt holes line up.
- 2) Install and tighten the 3/8" x 3/4" bolt securely using the 7/32" hex bit.



*Figure 6*

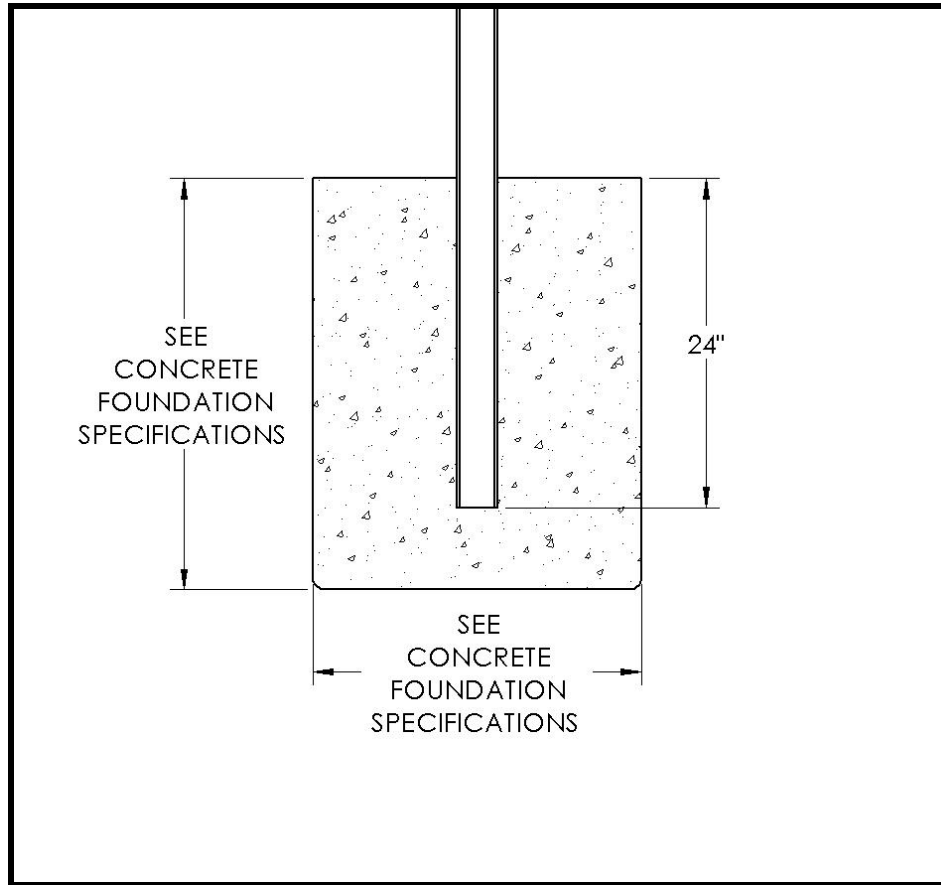
### Step 5 Attach Lite Housing Assembly to Lite Housing Fork

- 1) Retrieve the housing assembly and carefully position it (with solar panel facing up) so that the fork slides into the slots at the back of the housing. When the housing slides all the way down, there should be two “POPPING or CLICKING” sounds indicating that the housing is properly seated on the mounting fork.

**Caution: Do not let the housing turn upside down; the battery may hit and damage the solar panel and/or damage the wiring.**



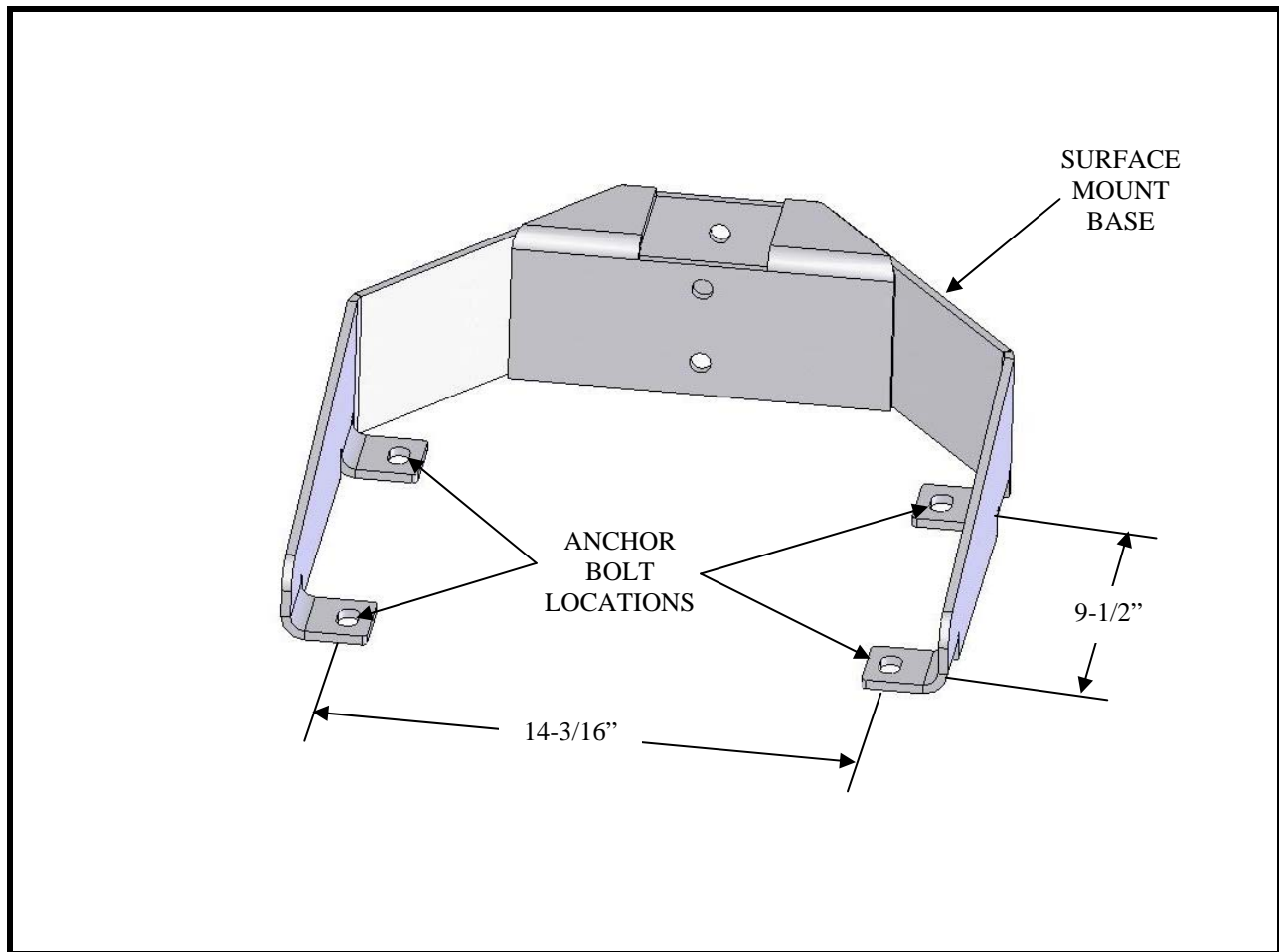
*WARNING: Lite housing must be completely and properly attached to the lite housing fork. Failure to do so may result in the housing falling from the fork, potentially causing serious injury.*



*Figure 7*

**Step 6 In-Ground Mount (If surface mounting skip this step and go to page 12, step 7)**

- 1) See figure 7 for a general illustration of mounting the pole in the ground.
- 2) For in-ground mounting specifics see concrete foundation specifications found in Appendix A pages 16-18.



*Figure 8*

**Step 7 Locating Surface Mounting Base on Concrete (If in-ground installation, refer to page 11, step 6)**

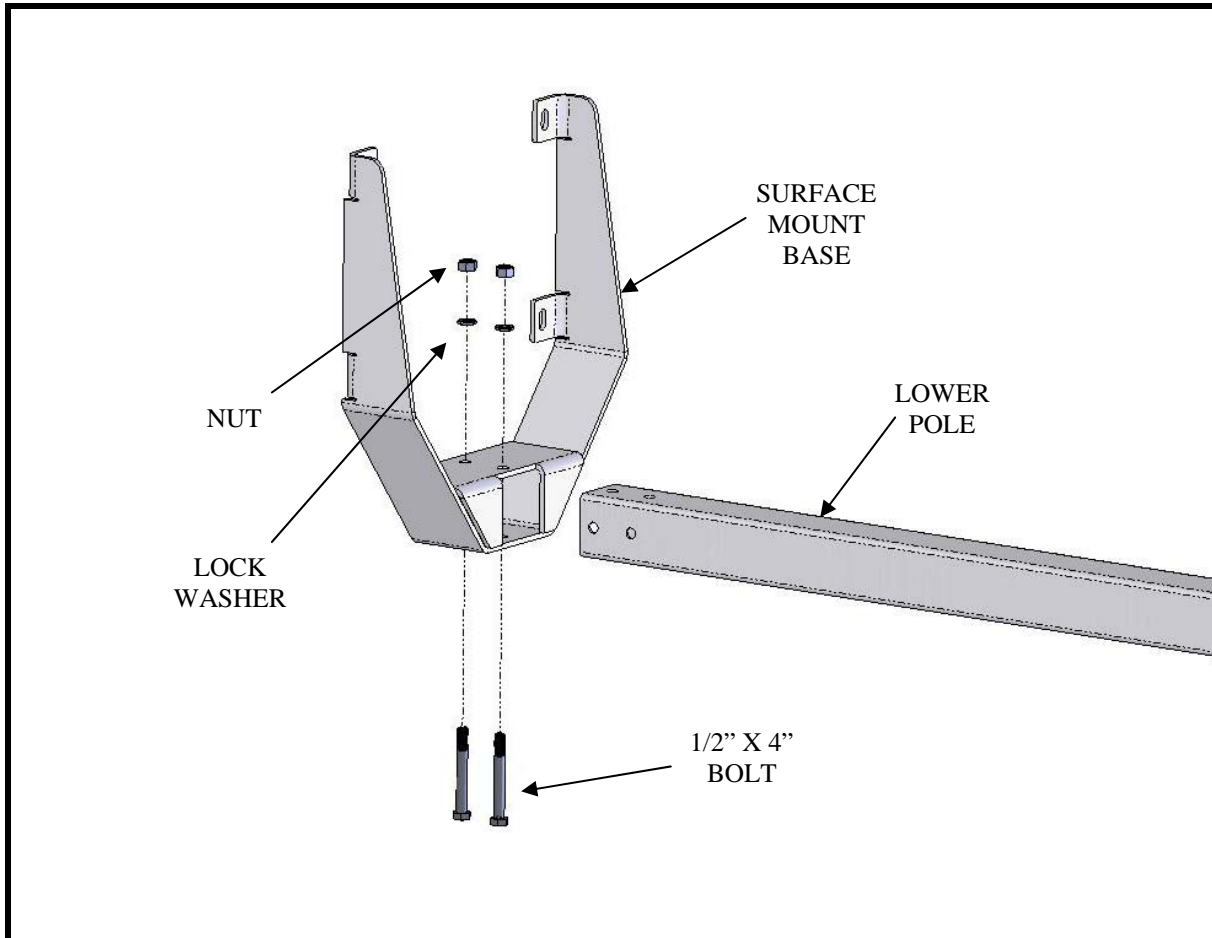
- 1) Locate the base in the desired mounting position.

**Note: If the sentinel™ solar site lite is to be mounted next to a Cluster Box Unit (CBU), make sure the surface mounting base is wrapped around pedestal base and is equidistant from the existing CBU mounting bolts on all sides.**

- 2) Drill the 1/2" holes in the concrete slab for the anchor bolts. Drill the holes a minimum of 6" deep.



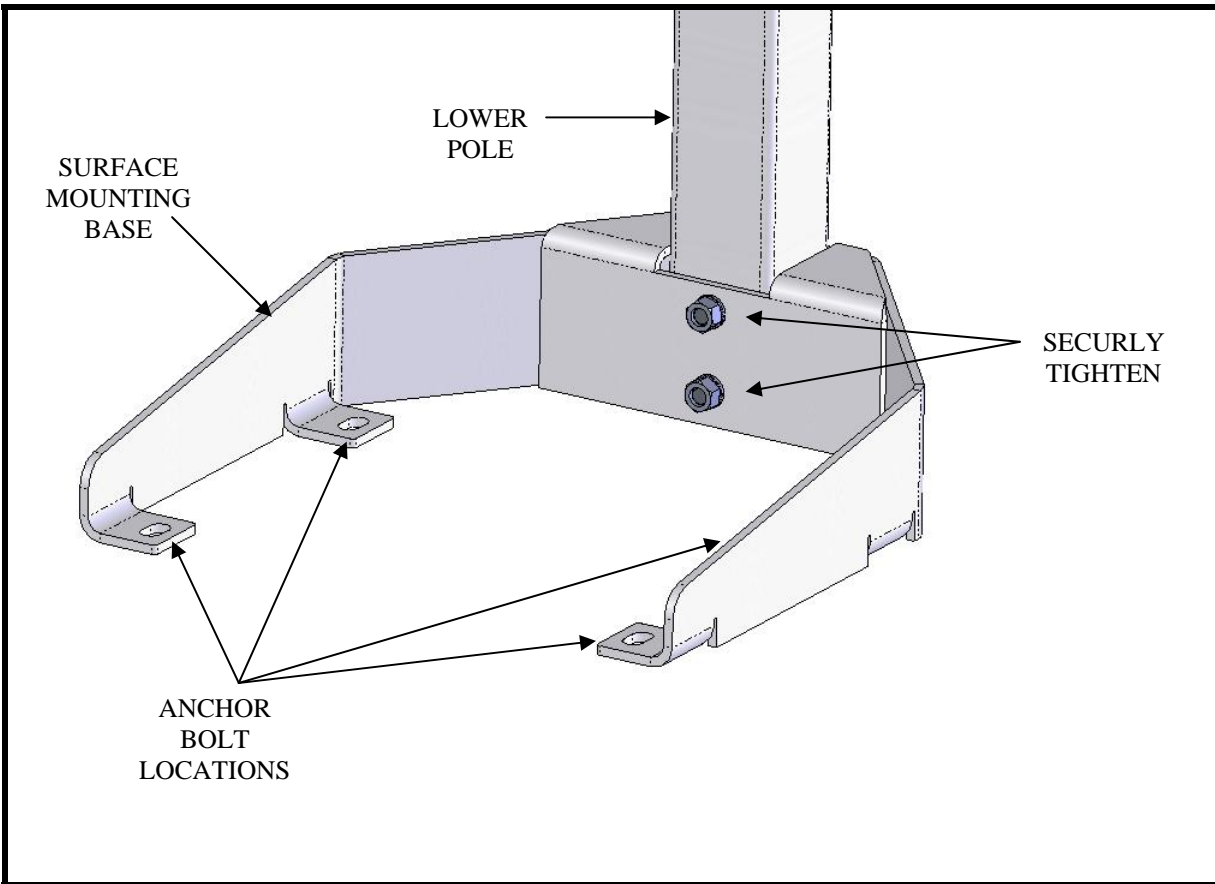
**WARNING:** Surface mount base must be properly installed to concrete pad with 1/2" anchor bolts. Failure to do so may result in the lite assembly falling over, potentially causing serious injury.



*Figure 9*

### **Step 8 Attach Surface Mount Base to Lower Pole**

- 1) With the pole lying horizontally, slide the base onto the bottom of the pole; making sure holes line up.
- 2) Secure the base to the bottom of the pole by installing the 1/2" x 4" bolts with lock washers and nuts on the inside through the pre-drilled holes in the pole.



**Figure 10**

### Step 9 Attach System to Concrete

(if in-ground installation, refer to page 11)

- 1) The system can now be raised into its full upright position.
- 2) While holding the lite assembly upright, align the base with the 1/2" holes (from step 8) in the concrete slab and install the concrete anchors.
- 3) Securely tighten the anchor bolt nuts.

**NOTE:** If the pad is not level, it may be necessary to shim the base to achieve plumb. Make sure to keep the assembly from falling over.



**WARNING:** Surface mounting base must be properly installed to concrete pad with 1/2" anchor bolts furnished by others. Failure to do so may result in the lite assembly falling over, potentially causing serious injury.

Your sentinel<sup>™</sup> solar site lite is now completely installed and should be operational.

## Step 10 Adjusting Motion Sensor Settings

The motion sensor has three performance adjustments and will be set by the factory. See Figure 11.

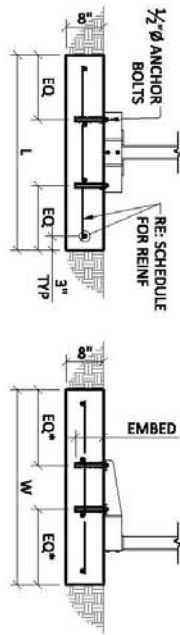
- Sensitivity – this adjusts how much movement is required to activate the sensor, and subsequently the sentinel™ lights.
- Photocell – this adjusts the amount of darkness required for the motion sensor to operate. To run the lights only after sundown, turn the dial clockwise.
- Time – this adjusts for how much time the LED lights will be on after they are activated. The range is from 5 seconds to 12 minutes.



*Figure 11*

Remember, the red LED in the motion sensor will activate during the day when it detects movement in the sensing area but, the lite should not activate during the day. At night the lite will stay on for 2 – 3 minutes per activation.

# sentinel™ solar site lite Pad Foundation Installation (Surface Mount)



**SECTION**  
SCALE: NONE  
EQ - EQUAL  
EW - EACH WAY  
MIN - MINIMUM  
CTR'D - CENTERED

PAD FOUNDATION			
IBC Basic Wind Speed	IBC Wind Exposure Category	LxW	Foundation Reinforcing
90 mph	B or C	3'-0"x3'-0"	(3) #4 EW CTR'D
	D	3'-6"x3'-6"	(4) #4 EW CTR'D
150 mph	B or C	4'-0"x4'-0"	(4) #4 EW CTR'D
	D	4'-6"x4'-6"	(4) #4 EW CTR'D

**STRUCTURAL NOTES:**

THIS DESIGN INTENDED FOR THE SUPPORT OF THE SOLAR LIGHT ASSEMBLY AS MANUFACTURED BY FLORENCE MANUFACTURING.

DESIGN IN ACCORDANCE WITH THE 2006 INTERNATIONAL BUILDING CODE (IBC). INSTALLER SHALL VERIFY LOCAL JURISDICTION FOR ADOPTIONS AND AMENDMENTS.

DESIGN WIND LOADS ARE BASED ON A BASIC WIND SPEED (3-SECOND GUST) OF 90 MPH & 150 MPH. RE SCHEDULE FOR FOUNDATION REQUIREMENTS BASED ON VARYING WIND SPEED & EXPOSURE CLASSIFICATIONS. INSTALLER SHALL VERIFY DESIGN WIND REQUIREMENTS WITH LOCAL JURISDICTION.

FOUNDATION HAS BEEN DESIGNED FOR A MINIMUM NET ALLOWABLE SOIL BEARING PRESSURE OF 1,500 PSF.

FOUNDATIONS SHALL BEAR IN UNDISTURBED SOILS OR CONTROLLED STRUCTURAL FILL AS APPROVED BY A GEOTECHNICAL ENGINEER.

VERIFY FROST PROTECTION REQUIREMENTS WITH LOCAL JURISDICTION.

CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS UNLESS OTHERWISE SPECIFIED.

THE WATER/CEMENT RATIO SHALL NOT EXCEED .50 FOR ALL CONCRETE.

REINFORCING STEEL SHALL BE BILLET STEEL CONFORMING TO ASTM A615, GRADE 60.

ALL CONCRETE SHALL BE AIR ENTRAINED, 6% (±) BY VOLUME.

ANCHOR BOLTS SHALL BE HILTI HIT-1Z/HV 150 MAX ADHESIVE, HDA UNDERCUT OR HSL OR HSL-3 HEAVY DUTY SLEEVE ANCHORS (OR APPROVED EQUIVALENT) AND SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

DESIGNED BY  
AMS

DRAWN BY  
AMS

APPROVED BY  
TRT

DATE  
11/08/07

SHEET NO.  
**S1.1**

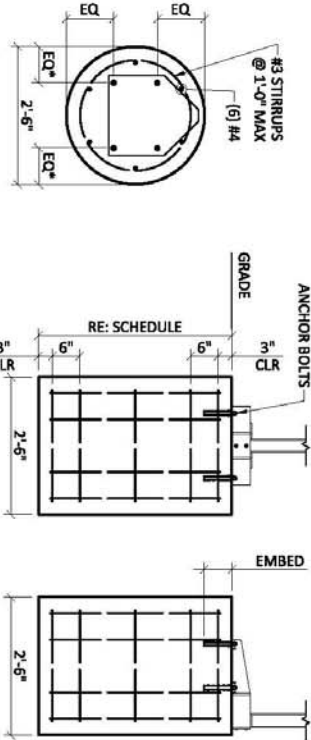
W.O. **01070065**

sentinel™  
PAD FOUNDATION INSTALLATION  
(SURFACE MOUNT)  
FLORENCE MANUFACTURING

**CERTUS**   
117 SW 6th Avenue; Suite 201  
Topeka, Kansas 66603  
Phone: (785)291-0400



# sentinel™ solar site lite Pier Foundation Installation (Surface Mount)



SCALE: NONE

SCALE: NONE

EQ - EQUAL  
CLR - CLEAR  
MIN - MINIMUM

PIER FOUNDATION			
IBC Basic Wind Speed	IBC Wind Exposure Category	Min Allowable Lateral Soil Bearing Capacity	Required Depth
90 mph	B	200 pcF	3'-0"
	C or D	100 pcF	3'-6"
		200 pcF	3'-0"
		100 pcF	3'-9"
150 mph	B	400 pcF	3'-0"
		200 pcF	3'-3"
		100 pcF	4'-0"
		400 pcF	3'-0"
150 mph	C	200 pcF	3'-3"
		100 pcF	4'-3"
		400 pcF	3'-0"
		200 pcF	3'-6"
150 mph	D	100 pcF	4'-6"
		400 pcF	3'-6"

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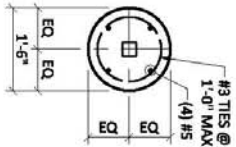
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APPROVED BY	TMT
DATE	11/08/07
SHEET NO.	W.O.

sentinel™  
PIER FOUNDATION INSTALLATION  
(SURFACE MOUNT)  
FLORENCE MANUFACTURING

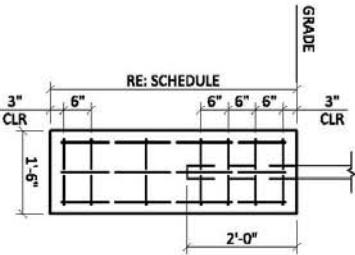
CERTUS AE GROUP  
117 SW 6th Avenue, Suite 201  
Topeka, Kansas 66603  
Phone: (785)291-0400

# sentinel™ solar site lite Pier Foundation Installation (Embedded In-Ground Mount)

PIER FOUNDATION			
IBC Basic Wind Speed	IBC Wind Exposure Category	Min Allowable Lateral Soil Bearing Capacity	Required Depth
90 mph	B	200 pcf	3'-0"
		100 pcf	3'-6"
	C	200 pcf	3'-0"
		100 pcf	3'-9"
150 mph	D	400pcf	3'-0"
		200 pcf	3'-3"
		100 pcf	4'-0"
	B	400 pcf	3'-3"
		200 pcf	4'-0"
		100 pcf	5'-0"
	C	400 pcf	3'-3"
		200 pcf	4'-6"
		100 pcf	5'-6"
	D	400 pcf	3'-6"
		200 pcf	4'-6"
		100 pcf	5'-9"



PLAN  
SCALE: NONE



SECTION  
SCALE: NONE

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DESIGNED BY  
AMS

DRAWN BY  
AMS

APPROVED BY  
TRT

DATE  
11/08/07

W.O.

010700065

S1.3

sentinel™  
PIER FOUNDATION INSTALLATION  
(EMBEDDED IN-GROUND MOUNT)

FLORENCE MANUFACTURING

CERTUS

117 SW 6th Avenue; Suite 201  
Topeka, Kansas 66603  
Phone: (785)291-0400

## Frequently Asked Questions

**Q – Can I set the light to run from dusk to dawn?**

A – No. The light is designed for intermittent use throughout the night. The battery and solar panel would need to be significantly larger to operate dusk to dawn lighting application.

**Q – How long will a battery typically last?**

A – The battery should last an average of 2 – 3 years. However, in colder climates the battery may not last as long, and conversely, in warmer climates the battery may last longer.

**Q – Will the light work if I place it in the shade?**

A – The light is solar; it must be exposed to direct sunlight in order to completely charge the battery. Having shade over the light will reduce the effectiveness of the solar panel and could cause the light to stop functioning.

**Q – How many hours of sunlight do I need each day so that the light will operate?**

A – You will need at least four “solar hours” per day for your light to operate with a 100% safety factor. See the “Solar Hours Per Day By Location” chart in the manual to determine the solar hours for your location. If you are in a location that has *less* than four solar hours, your system will have *less* reserve power than an area with *more* than four solar hours.

**Q – How long will the light operate without a recharge?**

A – It depends on your location. In sunny areas, such as southern California or Arizona, the battery will last several days without a recharge. In areas such as the state of Washington or Michigan, there are less “solar hours” per day, therefore less charging time per day, and the battery will not last as long. Refer to the “Solar Hours Per Day By Location” chart in the manual to determine the solar hours for your location. The more solar hours indicated for your location, the longer your solar light will operate without a recharge.

**Q – Where can I get a replacement battery?**

A – The battery is a *12 Amp-Hour sealed-lead-acid battery*. Replacement batteries may be purchased from a Authorized Florence Manufacturing Dealer or from a local store or other supplier that carries this type of battery. If you purchase a battery locally, be sure that the battery is sized properly to fit into the battery holder in the sentinel™ lite head unit.

**Q – Where can I get other replacement parts?**

A – Contact your Authorized Florence Dealer for replacement parts for the sentinel™ solar site lite or for any Florence products.

**Q – Will the light work immediately after I take it out of the box?**

A – The battery will need to charge before the light will work. It may take several hours of direct sunlight before the battery is fully charged.

## Solar Hours Per Day By Location

State	City	High	Low	Avg	State	City	High	Low	Avg
AK	Fairbanks	5.87	2.12	3.99	MO	Columbia	5.50	3.97	4.73
AK	Matanuska	5.24	1.74	3.55	MO	St. Louis	4.87	3.24	4.38
AL	Montgomery	4.69	3.37	4.23	MS	Meridian	4.86	3.64	4.43
AR	Bethel	6.29	2.37	3.81	MT	Glasgow	5.97	4.09	5.15
AR	Little Rock	5.29	3.88	4.69	MT	Great Falls	5.70	3.66	4.93
AZ	Tucson	7.42	6.01	6.57	MT	Summit	5.17	2.36	3.99
AZ	Page	7.30	5.65	6.36	NM	Albuquerque	7.16	6.21	6.77
AZ	Phoenix	7.13	5.78	6.58	NE	Lincoln	5.40	4.38	4.79
CA	Santa Maria	6.52	5.42	5.94	NE	N. Omaha	5.28	4.26	4.90
CA	Riverside	6.35	5.35	5.87	NC	Cape Hatteras	5.81	4.69	5.31
CA	Davis	6.09	3.31	5.10	NC	Greensboro	5.05	4.00	4.71
CA	Fresno	6.19	3.42	5.38	ND	Bismarck	5.48	3.97	5.01
CA	Los Angeles	6.14	5.03	5.62	NJ	Sea Brook	4.76	3.20	4.21
CA	Soda Springs	6.47	4.40	5.60	NV	Las Vegas	7.13	5.84	6.41
CA	La Jolla	5.24	4.29	4.77	NV	Ely	6.48	5.49	5.98
CA	Inyokern	8.70	6.87	7.66	NY	Binghamton	3.93	1.62	3.16
CO	Granby	7.47	5.15	5.69	NY	Ithaca	4.57	2.29	3.79
CO	Grand Lake	5.86	3.56	5.08	NY	Schenectady	3.92	2.53	3.55
CO	Grand Junction	6.34	5.23	5.85	NY	Rochester	4.22	1.58	3.31
CO	Boulder	5.72	4.44	4.87	NY	New York City	4.97	3.03	4.08
DC	Washington	4.69	3.37	4.23	OH	Columbus	5.26	2.66	4.15
FL	Apalachicola	5.98	4.92	5.49	OH	Cleveland	4.79	2.69	3.94
FL	Belie Is.	5.31	4.58	4.99	OK	Stillwater	5.52	4.22	4.99
FL	Miami	6.26	5.05	5.62	OK	Oklahoma City	6.26	4.98	5.59
FL	Gainesville	5.81	4.71	5.27	OR	Astoria	4.76	1.99	3.72
FL	Tampa	6.16	5.26	5.67	OR	Corvallis	5.71	1.90	4.03
GA	Atlanta	5.16	4.09	4.74	OR	Medford	5.84	2.02	4.51
GA	Griffin	5.41	4.26	4.99	PA	Pittsburg	4.19	1.45	3.28
HI	Honolulu	6.71	5.59	6.02	PA	State College	4.44	2.79	3.91
IA	Ames	4.80	3.73	4.40	RI	Newport	4.69	3.58	4.23
ID	Boise	5.83	3.33	4.92	SC	Charleston	5.72	4.23	5.06
ID	Twin Falls	5.42	3.42	4.70	SD	Rapid City	5.91	4.56	5.23
IL	Chicago	4.08	1.47	3.14	TN	Nashville	5.20	3.14	4.45
IN	Indianapolis	5.02	2.55	4.21	TN	Oak Ridge	5.06	3.22	4.37
KS	Manhattan	5.08	3.62	4.57	TX	San Antonio	5.88	4.65	5.30
KS	Dodge City	4.14	5.28	5.79	TX	Brownsville	5.49	4.42	4.92
KY	Lexington	5.97	3.60	4.94	TX	El Paso	7.42	5.87	6.72
LA	Lake Charles	5.73	4.29	4.93	TX	Midland	6.33	5.23	5.83
LA	New Orleans	5.71	3.63	4.92	TX	Fort Worth	6.00	4.80	5.43
LA	Shreveport	4.99	3.87	4.63	UT	Salt Lake City	6.09	3.78	5.26
MA	E. Wareham	4.48	3.06	3.99	UT	Flaming Gorge	6.63	5.48	5.83
MA	Boston	4.27	2.99	3.84	VA	Richmond	4.50	3.37	4.13
MA	Blue Hill	4.38	3.33	4.05	WA	Seattle	4.83	1.60	3.57
MA	Natick	4.62	3.09	4.10	WA	Richland	6.13	2.01	4.44
MA	Lynn	4.60	2.33	3.79	WA	Pullman	6.07	2.90	4.73
MD	Silver Hill	4.71	3.84	4.47	WA	Spokane	5.53	1.16	4.48
ME	Caribou	5.62	2.57	4.19	WA	Prosser	6.21	3.06	5.03
ME	Portland	5.23	3.56	4.51	WI	Madison	4.85	3.28	4.29
MI	Sault Ste. Marie	4.83	2.33	4.20	WV	Charleston	4.12	2.47	3.65
MI	E. Lansing	4.71	2.70	4.00	WY	Lander	6.81	5.50	6.06
MN	St. Cloud	5.43	3.53	4.53					

## Troubleshooting Guide

Symptom	Possible Causes	Corrective Action
Light does not work	A wire is disconnected or loose	Remove solar panel and inspect inside of unit for disconnected wire. Reattach or tighten wire that has come loose.
	Battery is dead	Make sure solar panel is exposed to sunlight so it charges. Shade from trees will not allow the solar panel to charge the battery adequately. Trees may need to be trimmed or the light may need to be moved to operate correctly. If the light is properly exposed to sunlight but still does not work, the battery may need to be replaced. Battery life is typically 2 - 3 years, depending on climate and usage. In colder climates the battery may expire sooner.
	Battery is not being charged	Make sure solar panel is exposed to sunlight so it charges. Shade from trees will not allow the solar panel to charge the battery adequately. Be careful to place light where it will receive direct sunlight.
	Solar panel is damaged	Replace solar panel. See the "Service Parts" section of the manual.
	Solar panel is dirty	Clean dirt/debris from solar panel using a soft cloth and warm water.
	Charge controller is not working	Remove solar panel and inspect inside of unit to determine if charge controller is not working. If the charge controller is working, the green LED should illuminate when the solar panel is exposed to sunlight.
Light goes on during the day	Wrong sensor settings	Remove solar panel and locate sensor dials. Adjust the "PHOTOCELL" dial more towards the "night" setting (clockwise). See the "Motion Sensor Settings" section of the manual.
	Sensor is no longer operational	If the LED on the sensor does not illuminate when motion is present, the sensor may no longer work and require replacement. See the "Service Parts" section of the manual.
Light does not stay on long enough	Wrong sensor settings	Remove solar panel and locate sensor dials. Adjust the "TIME" dial more towards the "12 Min" setting (clockwise). See the "Motion Sensor Settings" section of the manual.
Light stays on too long	Wrong sensor settings	Remove solar panel and locate sensor dials. Adjust the "TIME" dial more towards the "5 Sec" setting (counter-clockwise). See the "Motion Sensor Settings" section of the manual.
Light only works for the first few hours of the night.	Battery is not being charged completely	Make sure solar panel is exposed to sunlight so it charges. Shade from trees will not allow the solar panel to charge the battery adequately. Be careful to place light where it will receive direct sunlight.
Light turns on when no one is present	Wrong sensor settings	Remove solar panel and locate sensor dials. Adjust the "SENSITIVITY" dial more towards the "30%" setting (counter-clockwise). See the "Motion Sensor Settings" section of the manual.

***Thank you for purchasing Florence product!  
For more downloadable product information, brochures and  
technical specifications  
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***We appreciate your business.***